

60335-65

ACCESSION NR: AP5018295

7 kV applied potential. Orig. art. has: 24 formulas, 5 figures, and 3 tables.

ASSOCIATION: Politeknicheskii institut imeni V.I. Lenina, Khar'kov (Polytechnic Institute)

SUBMITTED: 66Jul64

ENCL: 00

SUB CODE: ME, NP

NO REF SOV: 006

OTHER: 003

Card 3/3 dnp

L 60329-65 EWT(1)/EPA(s)-2/EPA(w)-2/EWA(m)-2

ACCESSION NR: AP5018307

UR/C057/65/035/007/1265/1272

533.9

AUTHOR: Korsunskiy, M. I.; Gorbanko, E. N.

TITLE: On some properties of an electronic-ionic oscillatory discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 7, 1965, 1265-1272

TOPIC TAGS: discharge tube, oscillation, electron oscillation, ion oscillation

ABSTRACT: In order to investigate discharges analogous to the Penning discharge in which, however, it is ions rather than electrons that oscillate through an opening in one of the electrodes, the authors have constructed and operated a four-electrode discharge tube. The electrodes were four 20 cm diameter, 1 cm thick copper disks mounted parallel to each other on a 6 cm spacing. The edges of the electrodes extended beyond the quartz wall of the chamber and were water cooled. Electrodes 1, 2, and 3 had 2 cm diameter openings in their centers, and electrode 1 carried a hot tungsten filament. Electrodes 2 and 4 were maintained at the same high positive potential (up to 3 kV) with respect to electrode 3 and electrode 1 was kept at a moderate positive potential with respect to electrode 3. A longitudinal magnetic field up to  $5 \times 10^4$  A/m was provided. The behavior of

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L 80320-85

ACCESSION NR: AP5018307

the discharge tube for various electrode potentials and gas (air) pressures was observed and is described in considerable detail. The potentials on and the currents to all the electrodes were measured, the heat dissipated at electrode 3 was determined by measuring the temperature rise of the cooling water, and the discharge was observed visually. It was anticipated that electrodes 1, 2, and 3 would give rise to a Penning type discharge and that the ions produced by the oscillating electrons would execute analogous oscillations through the opening in electrode 3. It was found that the discharge was stable when the gas pressure exceeded  $6 \times 10^{-4}$  mm Hg. When electrodes 1 and 3 were maintained at the same or nearly the same potential, the discharge did not differ from that in a two-electrode tube. When the potential difference between electrodes 1 and 2 was considerably less than that between electrodes 2 and 3 and between 3 and 4, however, ion oscillations of the anticipated type occurred, even though the transverse velocities of the ions were considerable. The presence of ionic oscillations was indicated by an electron component in the current to electrode 4 and by the presence of cathode sputtering on the side of electrode 3 facing electrode 4.

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ACCESSION NR:AP5018307

The discharge was stable and the electron and ion oscillations could be independently regulated. In a preliminary discharge chamber with metal walls, currents up to 1 A were attained at gas pressures from  $10^{-4}$  to  $10^{-3}$  mm Hg with anode potentials up to 3 kV. Orig. art. has: 3 formulas, 4 figures, and 1 table.

ASSOCIATION: Politekhnilcheskiy institut imeni V.I.Lenina, Khar'kov (Polytechnic Institute)

SUBMITTED: 06Jul64

ENCL: 00

SUB CODE: ME, NP

NR REF SOV: 001

Card 3/3 *MP*

GORBENKO, F.P. (Morshin); BUDCHANOV, I.A. (Morshin); VELICHKOVSKIY, P.I. (Morshin)

Microchemical determination of general acidity and free hydrochloric acid in  
gastric juice. Klin.med. 31 no.10:48-50 0 '53. (MIRA 6:11)  
(Gastric juice)

DUROV, S.A.; GORBENKO, F.P.; URAZOV, G.G., akademik.

A case of abrupt stratification of mineral water in well shafts. Dokl. AN SSSR  
93 no.1:109-110 N '53. (MLRA 6:10)

1. Akademiya nauk SSSR (for Urazov).

(Mineral waters)

GORBEENKO, F. P.

The problem of microchemical determination of calcium in natural waters. F. P. Gorbenko (Health Resort, Morshansk, Gidrotekhn. Materialy 23, 104-105 (1956)).--Certain improvements suggested in the microchem. detn. of Ca in natural waters involve pptn., washing of the ppt., and titration. Weigh a 1-cc. sample of water contg. 0.07-0.4 mg. Ca, place in a centrifuge tube, add 1 drop concd. HCl, 2 drops aq. methyl red, and, after stirring, 1 cc. satd.  $\text{NH}_4\text{Cl}$  soln. Stir, let stand 1-2 min., and neutralize with 1%  $\text{NH}_3$  to pH 6.2 which is most favorable for pptn. Let stand 2-18 hrs., centrifuge, decant the supernatant, and wash the sediment with 3 cc. satd.  $\text{CaC}_2\text{O}_4$ , repeating the washing 3 times. Dissolve the sediment in 1 cc. 8%  $\text{H}_2\text{SO}_4$ , heat on a boiling water bath 1 min., and titrate with 0.01N  $\text{KMnO}_4$ , comparing the resulting pink color with a standard. To prep. the color standard, place 2.7 cc. of 5% basic fuchsin soln. (40 g./l.) into a 100-cc. volumetric flask, add 30-50 cc.  $\text{H}_2\text{O}$  and 2 cc. N  $\text{CaSO}_4 \cdot 5\text{H}_2\text{O}$ , and dil. to mark. Into a flask marked 0.06, place 50 cc. of the fuchsin soln.; decant the supernatant, add 0.06 cc. of 5%  $\text{KMnO}_4$ , shake, and transfer 3 cc. of each to centrifuge tubes which serve as the color standards. Deduct the no. on the standard tube which matches the end point from the total cc. of  $\text{KMnO}_4$  used in the titration. The error is 1%. If more than 1.5 g./l. Mg is present, reprecip. the  $\text{CaC}_2\text{O}_4$ . If more than 2.50 mg./l. Fe is present, add 1 drop of 30%  $\text{H}_2\text{O}_2$  before acidifying the sample.

A. S. Mirkin

Winters, P. F., Chudersko (Lithuania), Lithuanian, USSR  
Czechoslovakia. *Chemosphere*, 14, 89-90 (1975).  
The effect of radioactive cesium on water quality was  
studied for application to water analysis. The  
Cs+ with NaHCO<sub>3</sub> at pH 8.5 washes the soil surface  
and leaves some residual activity in the soil.  
In 5% HNO<sub>3</sub> solution and carrier with Cs+ KClO<sub>4</sub>  
until the appearance of a pink tint. To separate the  
sample with a standard test prep. from basic media  
Cs can be detd. with an error less than 1-2% in amts.  
of 0.01-0.4 mg. Up to 500 mg./l. Fe++ does not interfere.



GORBENKO, Fedor Polikarpovich; PIL'KEVICH, Stanislava Yulianovna;  
KIRICHINSKIY, A.R., red.; LOKHMATYY, Ye.G., tekhnred.

[Morshin Health Resort] Kurort Morshin. Izd.2., dop. 1  
ispr. Kiev, Gos.med.izd-vo USSR, 1959. 63 p. (MIRA 13:7)  
(MORSHIN--HEALTH RESORTS, WATERING PLACES, ETC.)

GORBENKO, F.P.; BORODA, T.A.

Determination of chlorides in gastric juice by the argentometric  
micromethod (More's method). Lab.delo 6 no.2:20-22 Mr-Apr '60.

(MIRA 13:6)

1. Kafedra khimii L'vovskogo pedagogicheskogo instituta (dir. -  
dotsent G.I. Iomov).

(GASTRIC JUICE)

(CHLORIDES)

GORBENKO, F.P.; SACHKO, V.V.

Extraction of calcium by means of azo-azoxy-butyl-naphthalene in the presence of polar solvents. Zhur.anal.khim. 18 no.10:1196-1205 0 '63. (MIRA 16:12)

1. All-Union Scientific-Research Institute of Chemical Reagents and Chemical Substances of Special Purity, Branch in Donetsk.

GORBENKO, F.P.; SHEVCHUK, I.A.; TSELINSKIY, Yu.K.; SACHKO, V.V.

Extraction of microquantities of calcium in the presence of  
alkyl amines. Zhur. anal. khim. 18 no.11:1397-1398 N '63.  
(MIRA 17:1)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta khimicheskikh reaktivov i osobo chistykh veshchestv.

GORBENKO, F.P.; SACHKO, V.V.

Determination of calcium microimpurities in alkali metal compounds  
by the use of extraction in the presence of tributyl phosphate.  
Zhur. anal.khim. 18 no.12:1497,1499 D '63. (MIRA 17:4)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv.

GORBENKO, F. P.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleyev. The opening address was made by Academician N. M. Zhavoronkov. Some 90 papers were presented, among them the following:

V. M. Peshkova and co-workers; F. P. Gorbenko and others; V. N. Podchaynova and others. Methods for determining microquantities of Ni in P, Ca in Be compounds, and small quantities of Tl in Sb based materials.

*(Zhur. Anal. Khim. 19, No 6 1964 p. 777-79)*

GORBENKO, F.P.; ZAKORA, L.Ya.

Determination of microgram quantities of iron in barium salts  
using a bathophenanthroline reagent. Trudy IREA no.25:321-324  
'63. (MIRA 18:6)

GORBENKO, F.P.; SHEVCHUK, I.A.; YALYNSKAYA, Ye.V.

Photocolorimetric determination of microgram quantities of  
nickel in lead salts. Trudy IREA no.25:325-328 '63.

(MIRA 18:6)



TSELINSKIY, Yu.K.; GORBENKO, F.P.; KRASUSSKAYA, T.A.

Determination of copper in nickel-zinc ferrites by the  
diethyldithiocarbamate method. Trudy IREA no.25:329-333  
'63. (MIRA 18:6)

GORBENKO, F.P.; SACHKO, V.V.

Extraction of calcium by means of azo-azoxy BN. Ukr. khim.  
zhur. 30 no.4:402-404 '64. (MIRA 17:6)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv.

GORBENKO, F.P.; TARKOVSKAYA, I.A.; OLEVINSKIY, M.I.

Determination of calcium microimpurities in alkali metal and ammonium salts after a preliminary concentration of oxidized carbon.  
Ukr. khim. zhur. 30 no.6:640-643 '64. (MIRA 18:5)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv i Institut fizicheskoy khimii imeni Pisarzhevskogo AN UkrSSR.

GORBENKO, F.P.; SACHKO, V.V.

Extraction separation and determination of calcium trace impurity  
in barium compounds. Zav. lab. 30 no.8:943-944 '64.

(MIRA 18:3)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv.

GOBENKO, F.P.; TARKOVSKAYA, I.A.; OLEVINSKIY, M.I.

Purification of alkalies by removing calcium microimpurities  
by means of oxidized carbon. Zhur. prikl. khim. 37 no.12:2745-  
2746 D '64. (MIRA 18:3)

TARKOVSKAYA, I.A.; GORBENKO, F.P.; YEMEL'YANOV, V.B.; OLEVINSKIY, M.I.

Concentration of microimpurities by means of oxidized carbon. Trudy  
Kom. anal. khim. 15:336-345 '65. (MIRA 18:7)

GORBENKO, F.P.; SACHKO, V.V.

Extraction-photometric determination of microimpurities of  
calcium in barium compounds. Zhur. anal. khim. 20 no.3:309-  
312 '65.

(MIRA 18:5)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo instituta  
khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

TARKOVSKAYA, I.A.; GORBENKO, F.P. Prinimala uchastiye PESTRIKOVA, N.I.

Separation of microamounts of calcium from barium, strontium,  
and magnesium by precipitation. Zhur. anal. khim. 20 no. 11:  
1185-1190 '65 (MIRA 19:1)

1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN UkrSSR,  
Kiyev i Donetskiiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv. Submitted June 4, 1964.



GORBENKO, F.P.; DEGTYARENKO, L.I.

Determination of calcium microimpurity in amphoteric metals  
and their compounds and alloys. Zav. lab. 31 no.11:1309-1312  
'65. (MIRA 19:1)

1. Donetskii filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh  
veshchestv.

GORBENKO, G.L.

Development of the gas industry in Tyumen' Province. Neftegaz.geol.  
i geofiz. no.1:31-34 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza.

VASIL'YEV, V.G.; GORBENKO, G.L.; MIRONCHEV, Yu.P.

Natural gas fields in Siberia. Gaz. prom. 10 no.1:8-13 '65.  
(MIRA 18:1)

BAGIRYAN, G.V.; VASIL'YEV, V.G.; GORBENKO, G.L.; MIRONCHEV, Yu.P.; KOCHAROV, S.M.

Oil and gas fields of Siberia. Neftgaz.geol. i geofiz. no.1:4-9  
'65. (MIRA 18:5)

1. Gosudarstvennyy geologicheskii komitet RSFSR i Vsesoyuznyy  
nauchno-issledovatel'skiy institut prirodnogo gaza.

GORBENKO, I.; KIRZNER, O.

~~SECRET~~

Defects of the 1949 type of grain elevator. Muk.-elev.prom. 21 no.5:  
14-15 My '55. (MIRA 8:9)  
(Grain elevators)

POGORELYY, W.P.; KOLGANOV, G.S.; GORHENKO, K.N.; SERVETNIK, V.M.;  
TOVAROVSKIY, I.G.

Desulfuration of pig iron before steel smelting. Met. i  
gornorud. prom. no.4:6-7 J1-Ag '65. (MIRA 18:10)

GORPENKO, L.

Gorbenko, L., and Feisik, M., "A Study of the Magnetic Susceptibility of Rocks (Magnetometers and their Application to Geo-Prospecting)." *Azerbaidzhanstee Neftianee Khimiyaistvo*, Baku, No. 2, 1934, pp. 22-27.

GORBENKO, L.

Gorbenko, L. "Prospecting for Oil Deposits by the Field Techniques of the Electrical Method." Azer'aidzhanskoe Neftianoe Khoziaistvo, Baku, No. 10.11, 1935, pp. 11-15.



GORBENKO, L. A.

Denisevich, V. V. and Gorbenko, L. A. Apparent Resistances of Oil Saturated Sands in Productive Layers." Azerbaidzhanskoe Neftianoe Khoziaistvo, Baku, No. 11/12, 1938, pp. 63-67.

SOV/169-59-2-1291

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 2, p 42 (USSR)

AUTHOR: Gorbenko, L.A.

TITLE: On the Interior Ballistics of Shooting Perforators

PERIODICAL: Tr. Vses. n.-i. in-ta geofiz. metodov pazvedki, 1957, Nr 2, pp 197 - 239

ABSTRACT: The formulae applied to the computing of interior ballistics of artillery systems are not suitable for computing the maximum pressures of the gunpowder timers in shooting perforators, where the density of the charge exceeds 0.8. The formulae taking in account the forces of intermolecular repulsion of the gunpowder gases, derived by S.B. Ratner for the products of pentrite explosions, are more accurate for the computations mentioned. The application of these formulae yielded a good coincidence of the computed and measured magnitude of the velocity of projectiles for different types of perforators. In these calculations, the quantity taking into account the effect of the volume of the gas molecules on the gas pressure (the co-volume) is taken as being a variable dependent on the density of charge. The maximum pressures in the perforators considerably exceed the pressure in artillery systems and amount to 22,000 - 26,000 kg/cm<sup>2</sup>. The

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On the Interior Ballistics of Shooting Perforators

SOV/169-59-2-1291

measurements of the pressures in the perforator chambers were carried out by means of crushers, and the velocities of the projectiles were measured by means of an electron chronograph "Universitet" with an accuracy of  $\pm 10^{-5}$  sec. The measured and computed data on the determination of the projectile velocity coincide with an accuracy of about 2 - 5%. The experimental investigations of the dependence of the maximum pressure in the perforator chamber on the density of charge showed that the pressures sharply increase with increasing density of charge from 1 to 1.4. The problems are investigated on the variability of the gunpowder gases pressure along the barrel of the perforator for various volumes of chambers, the dependence of the projectile velocities on the relation of the volume of the gunpowder chamber to the weight of the projectile and of the projectile velocity to the length of the barrel. It is shown that the projectile velocity increases approximately linearly from 650 to 800 m/sec when the length of the perforator barrel increases from 45 to 85 mm. The projectile velocities increase little with the forcing pressure arising when the obturator, steel and asbestos-rubber cement packings are employed. They even begin to decrease with increasing, up to 3 mm, thickness of the packings. Tables are given compiling the data characterizing the ballistical and technical properties of the applied perforators and their penetrating power. The method of the ballistic computation of a perforator and an example of computation are given. Bibl. 67 titles.

Card 2/2

N.A. Per'kov

Gorbenko, L.A.

3(5)	PHASE I BOOK EXPLORATION	507/2821
	Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki	
	Razvedochnaya i promyslovaia geofizika, vyp. 24 (Exploration and Industrial Geophysics, No. 24) Moscow, Gosoptekhnizdat, 1958. 58 p. (Series: Obmen proizvodstvennaya opytom) 4,500 copies printed.	
	Ed.: M.K. Polakhov; Rec. Ed.: Ye. G. Pershina; Tech. Ed.: I.O. Fedotova.	
	PURPOSE: This booklet is intended for geophysicists as well as engineers and technicians engaged in geophysical work.	
	COVERAGE: This collection of articles discusses new methods of interpreting electrical logging, gravimetric and seismic data, and describes industrial geophysical instruments (cementometer, perforator, etc.). Improvements made in older apparatus (e.g., a change in the design of a perforator for radioactive electrical logging) are also discussed. References accompany each article.	
	Popov, Yu. N. Interpretation of Telluric Current Observations	17
	Popov, Yu. N. Monogram for the Control of Angles in Constructing Vector Diagrams in the Telluric Current Method	22
	Bordovskiy, V.P. Computing Coefficients of Dipole Units in Curvilinear Logging	24
	Beloserev, I.P. Gravity Effect of a Vertical Cylinder of Finite Dimensions	26
	Molochnikov, Z.I. Evaluating the Character of Oil Saturation of Carbonaceous Reservoir Rocks Through Electrologging Data	34
	Aksel'rod, S.M. Well Cementometer for Operation With a Single-Strand Cable	37
	Zel'tsman, F.A. Substituting the Inclonometer ISH-3 and ISH-4 Tubochords Without Subsequent Rescaling	42
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	AVAILABLE: Library of Congress	
	Card 3/3	
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GORHENKO, L. A.

New perforators for oil wells. Razved i prom. geofiz. 24:46-56  
'58.

(MIRA 11:12)

(Oil wells--Equipment and supplies)

LOVLYA, Sergey Aleksandrovich; GORBENKO, Leonid Andreyevich; KAPLAN,  
Berta L'vovna; ISAYEVA, V.V., vedushchiy red.; POLOSINA, A.S.,  
tekhn.red.

[Torpedoing and perforation of wells] Torpedirovenie i perforatsiia  
skvashin. Moskva, Gos.nauchno-tekhn.izd-vo nef. i gorno-toplivnoi  
lit-ry. 1959. 247 p. (MIRA 12:4)  
(Petroleum engineering)

GRIGORYAN, Norayr Grigor'yevich; POMETUN, Dmitriy Yefimovich; GORBENKO,  
Leonid Andreyevich; LOVLYA, Sergey Aleksandrovich; KAPLAN, Berta  
I'vovna; CHERNOUSOV, P.K., inzh., retsēzent; PERSHINA, Ye.G.,  
vedushchiy red.; FEDOTOVA, I.G., tekhn.red.

[Perforating and blasting in wells] Prostrelochnye i vzryvnye  
raboty v skvazhinakh. Moskva, Gos.nauchno-tekhn.isd-vo neft.  
i gorno-toplivnoi lit-ry. 1959. 353 p. (MIRA 13:3)  
(Prospecting) (Blasting)

GORBENKO, L.A.

Device for cleaning the bottom part of bullets used with  
SSP perforators. Masved. i prom. geofiz. no. 3547-48  
'60.

(Oil well shooting)

(MIRA 13:12)



CHESNOKOV, A.A.; KROSHCHENKO, V.D.; GORBENKO, L.A.

Studying the impulse loads in shooting a perforator or core lifter.  
Razved. i prom. geofiz. no.46:118-125 '62. (MIRA 16:3)  
(Boring machinery--Testing)

FALK, I.B.; GORBENKO, I.A.

Determining the optimal perforation density on the basis of the  
results of well investigations. Neft. khoz. 41 no.3:44-51 Mr  
'63. (MIRA 17:11)

GORBENKO, L.A.

Efficiency of the PK-103 jet perforator. Neftegaz. geol. i  
geofiz. no. 12:40-46 '63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh  
metodov razvedki.

GORBENKO, L.A.; RACHKIN, A.I.

Electric parameters of KOBET-4 and KOBET-4 logging cables. Razved.  
i prom. geofiz. no.48:103-107 '63 (MIRA 18:1)

GORBENKO, L.A.; KULESHOV, Yu.N.

Distance-type switch. Biul.nauch.-tekh.inform VIMS no.1:101-103  
'63. (MIRA 18:2)

IL'IN, K.P., kand.tekhn.nauk; PLADIS, F.A., inzh.; ROSTOVSKAYA, Ye.P., inzh.;  
VOVCHENKO, P.I., inzh.; Prinimali uchastiye: GORFENKO, L.G., inzh.;  
SHESTAKOV, Yu.K., inzh.; LABADIN, S.I., inzh., retsenzent;  
MALAKHOV, K.N., inzh., retsenzent; PETROVA, V.L., inzh., red.;  
BOBROVA, Ye.N., tekhn.red

[Methods of determining freight weight] Sposoby opredeleniya  
vesa gruzov. Moskva, Vses.izdatel'skopoligr.ob"edinenie N-ya  
putei soob., 1961. 117 p. (Moscow. Vsesoiuznyi nauchno-  
issledovatel'skii institut zheleznodorozhnogo transporta.  
Trudy, no.215) (MIRA 15:1)

(Railroads--Freight)

(Weighing machines)

KASHEVNIK, L.D. (Tomsk, ul. Uchebnaya, d.20, kv. 40); GORBENKO, L.P. (Tomsk,  
B. Kazanskaya ul., d.61, kv.4)

Electrophoretic determination of changes in blood proteins in cancer.  
Vop.onk. 5 no.5:560-565 '59. (MIRA 12:12)

1. Iz kafedry biokhimii, kafedry gosital'noy khirurgicheskoy kliniki  
Meditsinskogo instituta i onkologicheskogo dispansera Tomsk (rukovo-  
ditel' - prof. L.D. Kashevnik).

(BLOOD PROTEINS, in various dis.

cancer (Rus))

(NEOPLASMS, blood in  
proteins (Rus))

GORBENKO, DR M. M.

PA 153T73

USSR/Medicine - Chemotherapy

Jul 49

"Magnesium Sulfate in the Therapy of Inflammations," Dr M. M. Gorbenko, Surg Dept, Leovsk Rayon Hosp, Moldavian SSR, 1 1/2 pp

"Sov Med" No 7

Tests on 110 patients proved that continuous intramuscular injection of 10 cc of a 25% solution of magnesium sulfate is a completely antiphlogistic and antispastic lenitive. Serious complications usually present for indicated dosage in parenteral introduction were absent. Method proved ineffective against very virulent infections, but speeded localization of deep abscesses in pliable tissues.

153T73



GORBENKO, M.M.

Magnesium therapy in thrombophlebitis of lower extremities. Vest.  
Vest.khir. Grekova 70 no.5:43-44 1950. (CML 20:5)

1. Head of Surgical Division of Leovo District Hospital.

GORBENKO, M. M.

Treatment of acute inflammatory processes in surgery from  
the viewpoint of Pavlov's theory. Sovet. med. no.7:4-8  
July 1951. (CJML 20:11)

1. Head of the Surgical Division of Rezinsk Rayon Hospital,  
Moldavian SSR.

GORBENKO, M.M.

Treatment of infected burns in children. *Pediatria, Moskva* no.  
4:59-61 July-Aug. 1952. (CEML 22:5)

1. Of Resinskiy Rayon Hospital (Head Physician - A. Ye. Raytburg).

(GORBENKO, M.M.)

Treating uncomplicated clavicle fractures. Ortop.travn. i protex.  
19 no.5:82-83 S-0 '58 (MIRA 11:12)

1. Iz khirurgicheskogo otdeleniya (zav. M.M. Gorbenko) Floreshtskoy  
raybol'nitsy (glavnyy vrach A.D. Volovskiy), MSSR.  
(CLAVICLE—FRACTURES)

CORBENKO, M.M. (Kherson)

First aid in burns. Sov.med. 26 no.7:102-103 J1 '62.  
(MIRA 15:11)

(BURNS AND SCALDS) (FIRST AID IN ILLNESS AND INJURY)

KONYAKHIN, I.R.; SEDOKOV, L.M.; GORBENKO, M.S.

Using a conical crusher to determine working forces. Zav. lab.  
24 no.5:632-633 '58. (MIRA 11:6)

1, Tomskiy politekhnicheskii institut.  
(Physical testing)

GORBENKO, N.I.

PHASE I BOOK EXPLOITATION

SOV/5902

Groshikov, Aleksandr Ivanovich, Yuriy L'vovich Zaslavskiy, and Nikolay Iosifovich Gorbenko

Zagotovitel'no-shtampovochnyye raboty v samoletostroyenii (Pressworking Processes in Aircraft Fabrication) Moscow, Oborongiz, 1961. 555 p. Errata slip inserted. 5000 copies printed.

Reviewer: M. N. Gorbunov, Candidate of Technical Sciences, Docent; Ed.: V. Ya. Shekhter, Candidate of Technical Sciences; Ed. of Publishing House: P. B. Morozova; Tech. Ed.: V. P. Rozhin; Managing Ed.: S. D. Krasil'nikov, Engineer.

PURPOSE: This textbook is intended for students in aircraft-construction tekhnikums. It can also be useful to workers, foremen, and process engineers in aircraft fabrication.

COVERAGE: Basic information is given on pressworking processes used on aircraft, including methods of planning the manufacturing processes and the design of

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SOV/5902

Pressworking Processes (Cont.)

accessories for shops making pressworked parts. The equipment, accessories, and processes used in making aircraft parts from sheet, shapes, and tube are described. Also discussed are the means for mechanization and automation of pressworking processes, particularly manual finishing operations, which account for to 30 to 60% of the labor in all pressworking operations in experimental and small-lot production. Ch. I to III were written by N. I. Gortenko, Engineer; Ch. IV to VII, XI, XIII, and XVI, by A. I. Groshikov, Engineer; and Ch. VIII to X, XII, XV, and XVI by Ya. L. Zaslavskiy, Engineer. There are 26 references, all Soviet.

TABLE OF CONTENTS [Abridged]:

Foreword	3
Ch. I. Basic Information on Preparation of Aircraft Production	5
Production and processing	5
Types of production	6
Engineering Preparation of production	6
Planning of manufacturing processes	7

Card 2/8



GOIBENKO, P.K.

Radiative and nonradiative electron transitions in F-centers.  
Izv. vys. ucheb. zav.; fiz. no.5:73-75 '63.

(MIRA 16:12)

1. Kiyevskiy politekhnicheskii institut.

SOV/133-59-4-9/32

AUTHOR: Gorbenko, P. B.

TITLE: The Determination of Overturning Moment of a Converter With Liquid Metal by Means of a Model (Opredeleniye na modeli oprokidyvayushchikh momentov konvertera s zhidkim metallom)

PERIODICAL: Stal', 1959, Nr 4, pp 320-322 (USSR)

ABSTRACT: On increasing the capacity of a converter from 30 tons to 35 tons it was necessary to check (by calculation) the strength of the reversing mechanisms and to determine the necessary power of the motor, used for turning the converter with liquid metal and without metal under various conditions: on pouring the metal into the ladle; on the removal of slag; on lifting the converter with metal for blowing etc. The determination of the maximum moment on the axis of turning of the converter was found to be necessary for the above calculations. This was carried out by calculating and measuring the individual component moments. The turning moment of liquid metal was determined using a model (scale 1 to 5, Fig 1 and 2) and water instead of liquid metal. The results of these determinations are shown

Card 1/2

SOV/133-59-4-9/32

The Determination of Overturning Moment of a Converter With Liquid Metal by Means of a Model

in the table and Fig 5. The total turning moment of the converter is the sum of the moments of liquid metal, inertia of rotating masses, static moments and friction moments. There are 5 figures and 1 table.

ASSOCIATION: Dnepropetrovskiy Gipromez (Dnepropetrovsk Gipromez)

Card 2/2

ACCESSION NR: AP4020927

8/0051/84/016/002/0260/0263

AUTHOR: Gorbenko, P.K.

TITLE: Luminescence of F' centers in KCl crystals

SOURCE: Optika i spek-troskopiya, v.16, no.2, 1964, 260-263

TOPIC TAGS: alkali halide crystal, potassium chloride, color center, F center, F' center, F' center luminescence, F' center absorption

ABSTRACT: The purpose of the present work was to investigate the characteristics of F' center luminescence at low temperature. It has been demonstrated by L.S.Druskina (ZhETF, 12, 54, 1942), H. Pick (Ann. Phys., 31, 365, 1938) and other investigators that under the influence of light with the wavelength of the F absorption band the F centers in colored alkali halide crystals transform to F' centers; the F' band is wider than the F band and shifted to the long wavelength side relative to the latter. The measurements were carried out on additively colored KCl crystals which initially contained only F centers (about  $10^{17}$  centers per  $\text{cm}^3$  according to evaluation by the Smakula formula). The crystals were mounted in a copper holder and cooled to liquid nitrogen temperature ( $-180^\circ\text{C}$ ). The optical absorption and the spectral lumi-

Card 1/4

ACCESSION NR: APL020927

nescence intensity distribution were measured by means of an IKS-11 infrared spectrometer coupled to an FEU-22 photomultiplier. The spectral sensitivity of the set-up was determined beforehand under standard conditions of illumination of the slit by an incandescent lamp with known color temperature. First, there was recorded the F center luminescence spectrum (Fig.1 in the Enclosure). Then the crystal was irradiated for about an hour by F absorption band light ( $\lambda_{\text{max}} = 1000 \text{ m}\mu$ ); this resulted in appearance of the F' band, which partially overlaps with the F band. The infrared (F') luminescence spectrum of a crystal containing both F and F' centers with illumination in the F' band is shown by curve a of Fig.2 (Enclosure); curve b in this figure shows the F' luminescence spectrum under illumination in the F band. It will be seen that the band becomes wider and its peak is shifted somewhat. Thus, the experimental results show that F' center luminescence is observed under illumination in the region of the F' absorption band (the emission peak is located at  $1040 \text{ m}\mu$ ); luminescence is also observed with stimulation in the region of the F band, which indicates energy transfer from the F to the F' centers. This process is accompanied by thermal dissociation of the F' centers (detachment of the electron) with resultant weakening of the F' center luminescence. "In conclusion, the author thanks N.P.Kalabukhov for suggesting the topic and discussion of the results; the author is also grateful to P.A.Yupachkovskiy for his interest in the work and use-

FUL "DISCUSSIONS"  
Card 2/4

Orig. A.T. HAS 4 figures

L 26/16-66 ENT(1) IJP(c)

ACC NR: AP6011556

SOURCE CODE: UR/0051/66/020/003/0453/0458

AUTHOR: Gorbenko, P. K.

ORG: none

TITLE: Kinetics of phototransformation of F centers into F' centers in alkali halide crystals.

SOURCE: Optika i spektroskopiya, v. 20, no. 3, 1966, 453-458

TOPIC TAGS: color center, alkali halide, electron recombination, light absorption, crystal vacancy, polaron, kinetic equation, relaxation process, crystal

ABSTRACT: The author investigates theoretically the kinetics of the transformation of F centers into F' centers by attachment of an electron to the former, taking into account the transport of energy from the excited F\* centers to the newly produced F' center. The transformation process is assumed to consist of excitation of the F center upon absorption of the light quantum, thermal dissociation of the excited center into a halide vacancy and a polaron, recombination of

Card 1/2

UIC: 535.37:548.0:620.192

L 26716-66

ACC NR: AP6011556

the polarons with either the vacancies (producing F centers) while with F centers (producing F' centers), transport of energy from the excited F\* centers to the produced F' centers, which subsequently dissociate into F centers and polarons. The kinetic equations for these processes are derived and are solved approximately by assuming that no new absorption bands, other than F' bands occur during the transformation of the F center into the F' center. The probability of energy transfer is determined from the dynamic equilibrium of the center density. The solution of the system of kinetic equations for the densities of the F and F' centers has a complicated time dependence, and the relaxation of the photoconductivity is exponential. The results were compared with experimental data on electrolytically colored KCl crystals irradiated with monochromatic light at 550 nm. The agreement between the theory and experiment was good. The author thanks N. P. Kalabukhov for guidance and P. A. Yurachkovskiy and V. Ya. Zevin for useful discussions. Orig. art. has: 2 figures and 20 formulas.

SUB CODE: 20/ SUBM DATE: 17Apr64/ ORIG REF: 008/ OTH REF: 003

Card

2/2 *IV*

ACCESSION NR: AP4020959

S/0051/64/016/003/0475/0479

AUTHOR: Kalabukhov, N. P.; Gorbenko, P. K.

TITLE: Concerning the kinetics of the photochemical reaction of conversion of F centers to M centers in KCl crystals

SOURCE: Optika i spektroskopiya, v.16, no.3, 1964, 475-479

TOPIC TAGS: color centers, alkali halide crystal, potassium chloride, F center, M center, M center model, photoconductivity, center luminescence

ABSTRACT: Although it is well known that as a result of irradiation of colored alkali halide crystals with light in the F band there form M centers (from the F centers) the mechanism of the conversion is still obscure and there is no unanimity concerning the structure of the M centers. Accordingly, the present work was devoted to investigation of the kinetics of photochemical conversion of F centers to M centers in KCl crystals. The initial additively colored KCl crystals contained only F centers (verified by observation of the absorption spectrum) with a concentration of about  $10^{17}$  per  $\text{cm}^3$ , as estimated by the Smakula formula. For the purpose of re-peak experiments with the same crystals the M centers (M band) were annihilated by

Card 1/2



ACCESSION NR: AP4020959

heating in the dark to 300°C. The main measurements were made at room temperature. In addition to the absorption spectra, recorded by means of an SF-4 spectrophotometer, the photoconductivity of the crystals was measured by means of a sensitive electrometer, and the luminescence by means of an FEU-22 photomultiplier. The experimental data are presented in the form of curves. The time measurements show that under F band (560 mμ) illumination equilibrium between the concentrations of F and M centers is attained in about half an hour, at which point the concentration of F centers falls off to about 8% the initial value. Analysis of the data indicates that the M centers form as a result of attachment of a neighboring defect by an excited F center. The M centers form in an excited state and then de-excite to the ground state nonradiatively. The temperature variation of the process of M center formation is exponential. There occurs, under continuing illumination, transfer of energy from excited F centers to the M centers, which luminesce in the infrared region. "In conclusion, the authors express their sincere gratitude to P.A.Yurachkovskiy for useful discussions of the work." Orig.art.has: 1 formula and 7 figures.

ASSOCIATION: none

SUBMITTED: 25Feb63

DATE ACQ: 02Apr64

ENCL: 00

SUB CODE: PH

NR REF SOV: 002

OTHER: 011

Card2/2

L 1556-66 EWT(d)/EWT(1)/EPF(n)-2/T IJP(o) WW/GG

ACC NR: AP6004406

SOURCE CODE: UR/0051/66/020/001/0069/0073

AUTHOR: Yurachkovskiy, P. A.; Gorbenko, P. K.

ORG: none

TITLE: Effect of temperature on the formation of  $Z_1$ -centers in  $KCl-CaCl_2$  crystals

SOURCE: Optika i spektroskopiya, v. 20, no. 1, 1966, 69-73

TOPIC TAGS: potassium chloride, calcium chloride, color center, absorption spectrum, low temperature effect

ABSTRACT:  $KCl-CaCl_2$  crystals were studied to determine the mechanism responsible for  $Z_1$ -centers. The crystals were grown by the Kyropoulos method from chemically pure salts. The melt contained 0.5 mol.%  $CaCl_2$ . The specimens were dyed by heating them in sodium vapor at 870°K for 1 1/2 hours. A spectrophotometer was used for measuring the absorption spectra at 90°K. Before the experiment, the specimen to be studied was heated in darkness to 470°K so that the initial absorption of the crystal was a pure F-band with a half-width of 0.22 ev. No  $Z_1$ -bands were formed at 170°K even with protracted F-irradiation. However, a weak  $Z_1$ -band appeared if the

Card 1/3

UDC: 535.34 : 548.0

L 15566-66

ACC NR: AP6004406

specimen was irradiated simultaneously with F-illumination and irradiation in the F'-band ( $\lambda_m = 740 \text{ m}\mu$ ), which is thermally stable and shows its highest intensity at this temperature. A weak  $Z_1$ -band is formed at 210°K even without additional irradiation by F'-light. However, F'-irradiation intensifies the formation of  $Z_1$ -centers. This shows that the formation of  $Z_1$ -centers at low temperatures is subordinate to the competing formation of F'-centers.  $Z_1$ -bands are formed with considerably less effort at temperatures above 250°K. Curves for absorption of the crystals as a function of temperature for the case of F-irradiation show that the sharpness of the peak for the  $Z_1$ -band decreases at higher temperatures. The broadening of the  $Z_1$ -band indicates that it is accompanied by another absorption band at longer wavelengths. The maximum for this band, determined by subtracting the Z-bands for temperatures of 320 and 250°K lies at about 610 m $\mu$ , i.e. it coincides with the maximum of the  $Z_2$ -band observed after heating a crystal with  $Z_1$ -centers to a temperature of 380°K. Curves are given showing the reduction in the F-band and the increase in the  $Z_1$ -band at various temperatures. These curves show that the formation of  $Z_2$ -centers at higher temperatures partially retards the increase in the  $Z_1$ -band. At the same time, the F-band is annihilated more quickly at higher temperatures. It is assumed that an ion process of F-center dissociation is superimposed on photothermal ionization of F-centers resulting in the formation of  $Z_2$ -centers which broaden the  $Z_1$ -band.

Card 2/3

L 15566-66

ACC NR: AP6004406

This ion process may be the association of the impurity ion-cation vacancy complex with an F-center due to an increase in the rate of diffusion of defects with higher temperatures. Orig. art. has: 2 figures, 2 formulas.

SUB CODE: 20/ SUBM DATE: 04May64/ ORIG REF: 001/ OTH REF: 014

BC  
Card 3/3

L 15281-66 ENT(1) IJP(c)

ACC NR: AP6006998

SOURCE CODE: UR/0051/66/020/002/0276/0282

AUTHOR: Gorbenko, P. K.

ORG: none

TITLE: Structure and transformation of color centers in KCl crystals

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 276-282

TOPIC TAGS: color center, electron transition, irradiation, *single crystal, light absorption, absorption spectrum, potassium chloride*

ABSTRACT: The nature of color centers in KCl crystals was investigated. Specimens 16 x 8 x 0.1—0.3 mm were obtained from KCl single crystals grown by the Kyropoulos method. The initial concentration of F-centers was of the order of  $\sim 10^{18} \text{ cm}^{-3}$ . A 150-w incandescent lamp was used as a light source for irradiation of the crystals. The optical absorption spectra were measured at room temperature and liquid nitrogen temperature. After a 4-hour irradiation of the crystal with a light  $\lambda = 560 \text{ m}\mu$  at room temperature,  $M_1$ -,  $R_1$ -,  $R_2$ -,  $N_1$ -, and  $N_2$ -centers appeared in the crystal. The form of the spectrum in the region of F-absorption changed considerably. Further, the symmetry of the absorption spectrum curve was distorted with regard to the maximum, and the halfwidth increased from 0.20 to 0.29 ev, which indicate that additional bands corresponding

Card 1/2

UDC: 548.0:620.192+535.37

L 15781-66

ACC NR: AP6006998

to electron transitions in centers of a different nature appear in the F-band region after irradiation of the crystal. The presence of bands in the region of F-absorption when F- and M-centers are in the crystal, their proportional change resulting from photochemical reaction in the transformation of F-centers into M centers, and their thermal destruction at the same temperature, shows that F(M) and  $M_1$  bands correspond to electron transitions in the same center. By investigating paramagnetic resonance, optical absorption, and reciprocal transformation of the coloration centers it was found that  $R_1$ -,  $R_2$ -,  $N_2$ -bands, as well as three bands in the F-absorption region, correspond to electron transitions in the  $F_4$ -centers generated as the result of the photochemical reaction of M-centers, whose dipole moments are oriented along the  $\langle 110 \rangle$ ,  $\langle \bar{1}\bar{1}0 \rangle$ , and  $\langle 100 \rangle$  directions. [JA]

Orig. art. has: 5 figures and 4 tables.

SUB CODE: 20/ SUBM DATE: 27Jun64/ ORIG REF: 008/ OTH REF: 022/ ATD PRESS:

4201

Card 2/2 7795

GORBENKO, S.M.

Use of Monomycin with prednisolone and monomycin with lidase in some obstetrical and gynecological diseases. Zdravookhraneniye 6 no.2:22-24 Mr~Ap'63. (MIRA 16:10)

1. Iz 1-go rodil'nogo doma g. Kishineva (glavnyy vrach T.A. Avksent'yeva) i kafedry mikrobiologii (zav. - prof. V.N. Derkach) Kishinevskogo meditsinskogo instituta.

\*

ACC NR: AP6035762

(A,N)

SOURCE CODE: UR/0413/66/000/019/0133/0134

INVENTOR: Kozlov, S. I.; Gorbenko, S. M.; Bakulina, R. I.; Kochetkov, Yu. V.

ORG: none

TITLE: Device for transmitting and automatically registering information from equipment in operation. Class 74, No. 186872

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 133-134

TOPIC TAGS: computer, computer system, industrial automation, industrial instrument, *INFORMATION PROCESSING*

ABSTRACT: An Author Certificate has been issued for a device for transmitting and automatically registering information from equipment in operation. The device consists of electric-pulse summation counters, telephone numerical selectors, equipment-condition transducers, interval scanners, and an electrical-circuit commutator. For the discrete automatic summation of equipment downtime, the commutator, which is in the form of a relay scanner, is connected through the normally closed contacts of the time-lag relay of the interval scanner's pulse pairs between the power supply and the interval-scanner's brushes, the contact leads off of the identical sign of which are connected to the electric-pulse summation counters.

SUB CODE: 09/ SUBM DATE: 23May64/

Card 1/1

UDC: 621.398:654.941



FRENKEL', Yefim Borisovich; KOMOLOV, Vladimir Georgiyevich; FAYB, Semen Isakovich; SAVCHENKO, Vsevolod Viktorovich; GORBENKO, S.S., inzh., retsenzent; LISITSYN, L.V., inzh., retsenzent; RYZHOV, B.V., inzh., retsenzent; TSOKANOV, A.V., inzh., retsenzent; KLIMOV, V.F., kand.tekhn.nauk, red.; BOBROVA, Ye.N., tekhn.red.

[Factory repair of electric railway motors and auxiliary machinery] Zavodskii remont tiagovykh dvigatelei i vopomogatel'nykh mashin. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshchenia, 1961. 366 p.

(MIRA 14:12)

(Electric machinery--Maintenance and repair)  
(Railroads--Electric equipment)

GORBENKO, S.S., podpolkovnik

"Assembling of radio equipment" by V.O. Bukler, IU.I. Rabinovich.  
Reviewed by S.S. Gorbenko. Vest. protivovozd. obor. no.9:78-79  
S '61. (MIRA 14:8)  
(Radio industry) (Bukler, V.O.) (Rabinovich, IU.I)

MALYSHKIN, Ye.V., inzh. [deceased]; GORBENKO, S.S., tekhnik

Improvement of the gland chambers of feed pumps. Energetik 11  
no.2:11-12 F '63. (MIRA 16:3)

(Pumping machinery, Electric)

MALYSHKIN, Ye.V., inzh. [deceased]; GORBENKO, S.S., teknik

Packing of turbine-condenser tubes. Energetik 10 no.12:24-25  
D '62. (MIRA 16:1)

(Condensers (Steam))

GORBENKO, S.S., tekhnik

Redesigning of the unloading device of the 5P-6-8 electric feed pump. .  
Energetik 11 no.5:12 My '63. (MIRA 16:7)

(Pumping machinery, Electric)  
(Electric power plants—Electric equipment)

GORBENKO, S.S., podpolkovnik

Phenomenon of long-distance scattering of shortwaves reflected  
from the earth. Vest. protivovozd. obor. no.11:47-50 N '61.  
(MIRA 16:10)

(Radio waves--Scattering)

GORBENKO, S.S., tekhnik

Redesigning of the reverse valve of the SS 100 x 10 electric  
feed pump. Energetik 11 no. 12:15-16 D '63. (MIRA 17:5)

GORJENKO, T., polkovnik; MOISEYEV, N., podpolkovnik

A tent for a medical disinfection installation. Voen. vest.  
43 no.2:115-116 F '64. (MIRA 17:1)



BESKOROVAYNYY, B., inzh. (Kiyev); GORBENKO, V., inzh. (Kiyev)

Simple logarithmic voltmeter. Radio no.6:52-53 Je '65.

(MIRA 18:10)

GORBENKO, V.F.; MIRONOV, S.I., akademik.

Stratigraphy of Cretaceous deposits at the north-eastern fault-walls of the Black Sea depression. Dokl. AN SSSR 93 no.1:135-137 N '53. (MIRA 6:10)

1. Akademiya nauk SSSR (for Mironov). 2. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo (for Gorbenko).

(Black Sea region--Geology, Stratigraphic)

(Geology, Stratigraphic--Black Sea region)

GORBENKO, V. F.

USSR/ Geology - Tectonics

Card 1/1 Pub. 22 - 36/51

Authors : Gorbenko, V. F.

Title : ~~Connection between the cracks of upper Cretaceous deposits and the tectonics of the north-western region along the Donets ridge~~  
Connection between the cracks of upper Cretaceous deposits and the tectonics of the north-western region along the Donets ridge

Periodical : Dok. AN SSSR 101/2, 331-334, Mar 11, 1955

Abstract : Geological data are presented regarding the relation between the cracks observed in the upper Cretaceous deposits and the tectonics of the north-western section of the Donets River basin. Five Russian and USSR references (1830-1940). Map.

Institution : The A. M. Gorkiy State University, Kharkov

Presented by: Academician S. I. Mironov, November 27, 1954

GORBENKO, V. F.

GORBENKO, V. F. "The Stratigraphy and Tectonics of the Upper Cretaceous Deposits in the Zone of Dome-Structure Development on the Northwestern Edge of the Donets Ridge." Min Higher Education Ukrainian SSR. Khar'kov Order of Labor Red Banner State U imeni A. M. Gor'kiy. Khar'kov, 1956. (Dissertation for the Degree of Candidate in Geologicomineralogical Science)

So: Knizhnaya Letopis', No. 19, 1956.

V. F. GORBENKO

USSR/Geology

Card 1/1      Pub. 22 - 28/43

Authors      : Gorbenko, V. F.

Title        : Senoman stage deposits along the north-western section of the Donetsk crest

Periodical   : Dok. AN SSSR 106/1, 106-109, Jan 1, 1956

Abstract     : Geological data are presented on the Senoman stage (clauconite) deposits found along the north-western section of the Donetsk crest in the USSR. Nineteen references: 18 USSR and 1 Germ. (1893-1955).

Institution : Kharkov State University im. A. M. Gorkiy

Presented by: Academician S. I. Mironov, June 29, 1955

20-117-5-42/54

AUTHOR: Gorbenko, V. F.

TITLE: Pseudospiroplectinata - a New Genus of Foraminifera From Upper Cretaceous Deposits of the Northwestern Donets Basin (Pseudospiroplectinata - novyy rod foraminifer iz verkhnemelovykh otlozheniy severo-zapadnogo Donbassa)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 5, pp. 879 - 880 (USSR)

ABSTRACT: During the micropaleontological investigations (references 1, 2, 4, 5) besides already known species of this group individuals were found of species lacking in the references. Some are worth to be separated as a new genus. Family Verneulinidae Cushman, 1928. Genus Pseudospiroplectinata gen.nov. Generotype: Ps.plana sp.nov. upper Senoman of the Khar'kov region, district of Petrovskiy and Iziunskiy. Original in the collection of the author number 22/8 and in the Allunion Scientific Geological Research Institute (Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy institut). The genus is similar to a certain extent to the genus Gaudryinella Plummer, 1931, according to the chamber arrangement. It differs from the latter by a flattened shell and an almost complete lack of silicate formations in it. It also reminds of Spiroplectinata Cushman, 1927, is, however, in the early stages tri-

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20-117-5-42/54

Pseudospiroplectinata - a New Genus of Foraminifera From Upper Cretaceous Deposits of the Northwestern Donets Basin

farious and not spiral; the agglutination of the walls is unimportant. All 6 species belong to the same species. The description of the single species follows. The main characteristic features of the species are rather constant in the found individuals. The number of chambers varies in the trifarious series, does, however, never surpass 6. There are 1 figure, and 7 references, all of which are Slavic.

ASSOCIATION: Mining Institute Khar'kov  
(Khar'kovskiy gornyy institut)

PRESENTED: July 22, 1957, by S. I. Mironov, Academician

SUBMITTED: July 18, 1957

Card 2/2

3(5)

AUTHOR:

Gorbenko, V. F.

SOV/20-128-3-40/58

TITLE:

A Detailed Stratigraphic Subdivision of Upper Cretaceous Deposits on the North-western Border of the Donbass, and the Coordination of Microfaunistic Complexes With the Diagrams of Standard Electric Logging

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 3, pp 578-581 (USSR)

ABSTRACT:

The stratigraphy of the sediments mentioned in the title is based on a scheme of A. D. Arkhangel'skiy and N. S. Shatskiy (Ref 1), which was later on detailed by O. R. Konoplina (Ref 4). The subdivision of Cretaceous formations suggested by the two former investigators cannot be used in the practice of prospecting boring since it does not contain any distinct boundaries between individual steps. Neither is there any macrofauna, or - if there is one - it is badly preserved. The author classified the said sediments on the basis of vertical propagation of the rhizopod fauna, comparing it with an even-aged fauna of the Russian Platform and other countries. He found 123 species, 2 subspecies and 9 varieties. This made possible the elimination of 12 characteristic microfaunistic complexes.

Card 1/2



A Detailed Stratigraphic Subdivision of Upper  
Cretaceous Deposits on the North-western Border of the Donbass, and the  
Coordination of Microfaunistic Complexes With the Diagrams of Standard Electric  
Logging

SOV/20-128-3-40/58

The author gives lists of species for 5 steps of the Upper Cretaceous system. The stratification scheme developed on the basis of vertical propagation of the most characteristic species of foraminifera can be put in good agreement with the diagrams of standard electric logging (Fig 1). It may be extensively used in the practice of petroleum- and natural gas prospecting. There are 1 figure and 4 Soviet references.

ASSOCIATION: Voroshilovskiy gorno-metallurgicheskiy institut  
(Voroshilovsk Mining Metallurgical Institute)

PRESENTED: May 4, 1959, by D. V. Nalivkin, Academician

SUBMITTED: April 9, 1959

Card 2/2

GORBENKO, V.F.

New species of foraminifera from upper Cretaceous sediments in the  
northwestern border of the Donets Basin. Izv.vys.ucheb.zav.; geol.  
i razv. 3 no.1:67-76 Ja '60. (MIRA 13:7)

1. Voroshilovskiy gorno-metallurgicheskiy institut.  
(Donets Basin--Foraminifera, Fossil)

GORBENKO, V.F.

Recent data on Cenomanian spongolites in northwestern outskirts  
of the Donets Basin. Dokl. AN SSR 135 no.1:146-147 N '60.

(MIRA 13:11)

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